

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker Governor

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> Martin Suuberg Commissioner

August 23, 2017

Mr. Tom Keefe Global Companies LLC 140 Lee Burbank Highway Revere, MA 02151 RE: **REVERE**

Transmittal No. X275772 Application No. NE-17-012

Class: OP

FMF No.: 52280

AMENDED CONDITIONAL PLAN APPROVAL

Dear Mr. Keefe:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed substantial reconstruction and/or operation of the truck loading rack at your bulk terminal facility located at 140 Lee Burbank Highway in Revere, Massachusetts ("Facility"). The Application bears the seal and signature of Stephen G. Piper, Massachusetts Registered Professional Engineer Number 36039.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

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1. <u>DESCRIPTION OF FACILITY AND APPLICATION</u>

The Permittee handles a variety of organic liquids generally categorized as gasoline, ethanol, and distillate oil products. The Permittee receives these products by ship, barge, rail, truck or pipeline and stores the products in internal floating roof and fixed roof storage tanks. Gasoline, ethanol and distillate oil products are then loaded into over-the-road tank trucks through a truck loading rack. Distillate oil products are also loaded into marine vessel cargo tanks for marine transport. The Permittee received Approval No. MBR-09-IND-017, dated June 2, 2010, for the installation and operation of a gasoline and ethanol marine loading system. Petroleum products can also be distributed from the Facility via pipelines. The primary air emissions from the Facility are volatile organic compounds (VOC) and hazardous air pollutants (HAPs), including working and breathing emissions from the Facility's storage tanks, emissions from storage tank degassing activities associated with tank cleanings, emissions from floating roof tank landings associated with product changes, and emissions from tank truck and marine vessel cargo tank loading operations.

The Facility is categorized as a major source of air pollution with potential VOC emissions greater than fifty (50) tons per year. The Facility is categorized as a minor (area) source of HAPs with allowable emissions (Modified Conditional Approval No. MBR-99-IND-006, dated September 6, 2006) of less than or equal to nine (9) tons per year of any individual HAP or twenty four (24) tons per year of combined HAPs. However, the Facility is currently still subject to Federal Regulation 40 CFR Part 63, Subpart R for HAPs emissions due to the United States Environmental Protection Agency (EPA) current "Once In, Always In Policy."

On February 13, 2013, the Permittee received Approval No. MBR-10-IND-014 for expansion of the gasoline loading rack, an increase in the daily and annual gasoline throughput limits, upgrading the vapor recovery unit (VRU), and replacing the positive displacement vapor collection system with a vacuum assist negative pressure technology ("VANPT") collection system. Additionally, the Approval included a proposal to perform blending operations of gasoline products in five existing internal floating roof storage tanks. The Approval also included a new facility wide VOC emission cap of 197 tons per year; effectively exempting the Facility from Best Available Retrofit Technology (BART) requirements (see Table 2 Facility wide emissions limits).

This Application proposes to modify the truck loading rack at the Facility by reconfiguring the loading arms within the eleven (11) existing truck bottom loading lanes to add four (4) gasoline arms and remove two (2) distillate arms. In addition, the Permittee requests to increase the maximum design instantaneous loading rate of 10,800 gallons per minute (gpm) in the 2013 Conditional Approval to 11,900 gpm. The modifications were proposed after the Permittee consulted with The John Zink Company (Zink), manufacturer of the VRU and VANPT. Zink provided a written summary explaining that the vapor collection and recovery system has a safety factor incorporated into the design such that it would meet all performance guarantees at 11,900 gpm without requiring any upgrades to the VRU and VANPT. The VRU and VANPT capture and control VOC fugitive emissions during truck loading, and will continue to be restricted to 2 milligrams per liter, or less, of gasoline loaded over a one-hour period, which is considered Best Available Control Technology (BACT). The proposed modifications will relieve truck congestion

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that can create safety issues on Lee Burbank Highway during certain periods of the day. The proposed modifications will not change any of the daily, monthly or annual gasoline throughput or emission limitations or any monitoring/record keeping/reporting requirements of the existing Conditional Approval MBR-10-IND-014.

The significant modifications to Conditional Approval MBR-10-IND-014 are stated below:

- A. Page 1: change the Responsible Official from Ron Kenny to Tom Keefe and company name from Global Petroleum Corp. to Global Companies LLC;
- B. Page 3, Table 1: increase the total number of bottom loading arms from 20 to 22 and maximum organic liquid flow rate from 10,800 gpm to 11,900 gpm;
- C. Page 4, Table 1A: change Bay 8 from 1 DIST to 2 GAS and 1 DIST, Bay 9 from 2 DIST to 1 DIST, Bay 10 from 2 DIST to 1 DIST, and Bay 11 from 1 DIST to 2 GAS and 1 DIST;
- D. Page 9, Table 5: Item 2 was not required since there were no revisions to the plans and specifications provided in the Application for the VRU, VANPT, and Continuous Emissions Monitoring Systems (CEMS) prior to commencement of operation of the upgraded VRU;
- E. Page 9, Table 5: Item 3 has been removed since submittal to MassDEP of the quality assurance/quality control (QA/QC) program was completed prior to commencement of operation of the upgraded VRU;
- F. Page 9, Table 5: Item 4 has been removed since submittal to MassDEP of a preliminary protocol for operation of the upgraded VRU was completed prior to commencement of operation of the upgraded VRU.
- G. Page 12, Special Terms and Conditions Item 4 i) has been removed since submittal to MassDEP of the emission factors and calculation procedures used to determine HAPs emission limits in Table 2 was completed.

2. EMISSION UNIT IDENTIFICATION/REQUIREMENTS

Each Emission Unit ("EU") identified in Table 1 and Table 1A is subject to and regulated by this Plan Approval:

Table 1			
Emission Unit (EU)	Description	Design Capacity	Pollution Control Device (PCD)
P2-1	Loading Rack with VANPT: 11 bottom loading bays with a total of 22 loading arms	Maximum organic liquid flow rate of 11,900 gallons loaded per minute from bottom loading bays	PCD2 - Vapor Recovery Unit (VRU) with Booster Blower, including Regenerative Activated Carbon Bed Adsorption System (ACBAS) with Vacuum Assist Negative Pressure Technology (VANPT) John Zink Model AAT-825-11-9-10-2-X with Booster Blower MD9020 (or equivalent)
R4-17	Above ground internal floating roof petroleum storage tank, bolted sheet roof, leg supported when landed	KEVCO Tank 1/ 5 174 022 gallons 140 0 foot (ft)	Internal floating roof, liquid mounted primary rim seal, rim mounted secondary seal
R4-20	Above ground internal floating roof petroleum storage tank, bolted sheet roof, leg supported when landed	REVCO Tank 20 6,001,548 gallons, 150.0 ft diameter	Internal floating roof, liquid mounted primary rim seal, rim mounted secondary seal
S4-32	Above ground internal floating roof petroleum storage tank, Bolted sheet roof, leg supported when landed	South Tank 32 2,199,000 gallons, 97.0 ft diameter	Internal floating roof, vapor mounted primary rim seal, rim mounted secondary seal
S4-34	when landed	South Tank 34 2,296,000 gallons, 97.0 ft diameter	Internal floating roof, vapor mounted primary rim seal, rim mounted secondary seal
S4-39	Above ground internal floating roof petroleum storage tank, bolted sheet roof, leg supported when landed	South Tank 39 3,148,000 gallons, 117.0 ft diameter	Internal floating roof, vapor mounted primary rim seal, rim mounted secondary seal

EU P2-1 shall be comprised of that portion of the loading rack with VANPT, which includes Bays 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11. Tank trucks loading in said bays shall only be loaded from the bottom (bottom loading). The Permittee shall insure that tank trucks previously containing gasoline and returning to the Facility to load distillate fuel products (switch loading) shall only do so in bays with VANPT. There shall be no loading of gasoline or switch loading in Bays 12, 13, 14, 15, 16 and 17, which shall be designated for loading of tank trucks from the top (top loading) only.

The entire loading rack at the Facility shall be configured as follows:

Table 1A				
Bay Number	Connection to VANPT	Tank Truck Loading Configuration	Number of Arms	Product Loaded
1	YES	BOTTOM	2	GAS
2	YES	BOTTOM	2	GAS
3	YES	BOTTOM	2	GAS
4	YES	BOTTOM	2	GAS
5	YES	BOTTOM	2	GAS
6	YES	BOTTOM	2	DIST
7	YES	BOTTOM	2	DIST
8	YES	BOTTOM	3	2 GAS, 1 DIST
9	YES	BOTTOM	1	DIST
10	YES	BOTTOM	1	DIST
11	YES	BOTTOM	3	2 GAS, 1 DIST
12	NO	TOP	2	DIST
13	NO	TOP	2	DIST
14	NO	TOP	2	DIST
15	NO	TOP	2	DIST
16	NO	TOP	2	DIST
17	NO	TOP	2	DIST

The loaded products fall into two categories: 1) DIST (distillate products) - organic materials having a vapor pressure of less than 1.5 pounds per square inch absolute and, 2) GAS (ethanol and gasoline products with additives) - organic materials having vapor pressure of 1.5 pounds per square inch absolute or greater except that ethanol, which has a vapor pressure of less than 1.5 pounds per square inch absolute, shall be included in this category.

Bays with VANPT (Bays 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11) shall manage product flow such that the combined product flow rates do not exceed the VRU designed capacity of 11,900 gallons per minute as stated in Table 1.

To ensure that the unit does not receive vapors at a rate above capacity, the Permittee shall monitor the pressure in each Bay's vapor line to ensure that the vacuum pressure meets the level specified in Table 2. Additionally, the VRU shall be equipped with shutdown fault conditions that will sense a possibility that the system is failing to operate at the design capacity (valve failures, vacuum pump failures, high temperatures, absorbent flow failure, and/or high pressures). Lastly, the Permittee shall monitor the VOC outlet concentration to assure conformance with the emission limitation in Table 2 below.

Electronic interlocks for each of the loading bays, and visible and audible alarms in the Facility's control room, shall continue to be maintained and operated to prevent loading of any tank truck if the vapor recovery hose is not connected properly or whenever either the minimum required vacuum pressure at the tank truck/VANPT interface or the new VRU's maximum VOC emission limit is reached and/or exceeded. See Table 3, Numbers 2 and 3 below.

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The blending operations proposed for REVCO Tanks 17 and 20 and South Tanks 32, 34, and 39 will allow the Permittee to combine non saleable gasoline products with necessary components to meet specifications for saleable gasoline products. The blending will be done by combining the products through the filling process alone, no mechanical agitation or air sparging will be used. Potential emissions from the five blend tanks are higher because the Reid Vapor Pressure (RVP) of the products may be higher than that of saleable products.

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

Table 2				
EU#	Operational/Production Limit	Air Contaminant	Emission Limit	Applicable Regulation and/or Approval Number
	Gasoline Throughput Limit: ≤ 4.5 million gallons per day ≤ 750 million gallons per 12- month rolling period Vacuum Pressure at Loading	VOC	≤ 2 mg per liter of gasoline loaded over a one-hour period for PCD2 CEMS Correlation Factor (Refer to Special Terms and Conditions, Item 1 ≤ 6.3 tons per 12-month rolling period	
P2-1	Tank Truck: ≤ -3 inches of H ₂ O (or other value as approved by MassDEP), 15-minute rolling average, (or other value as approved by MassDEP)	Individual HAP (1) Combined HAPs (1)	≤ 0.04 tons per month ≤ 0.08 tons per 12-month rolling period ≤ 0.15 tons per month ≤ 0.3 tons per 12-month rolling period	310 CMR 7.02
R4-17, R4-20, S4-32, S4-34,	Total Gasoline Throughput Limit: ≤ 188 million gallons per month	VOC Individual HAP (1) Combined HAPs (1)	\leq 21.9 tons per month \leq 43.8 tons per 12-month rolling period \leq 0.9 tons per month \leq 1.8 tons per 12-month rolling period \leq 1.4 tons per month \leq 2.8 tons per 12-month rolling period	310 CMR 7.02 310 CMR 7.24
S4-39	≤ 375 million gallons per 12- month rolling period	VOC	Concentration of VOC in the vapor space above the internal floating roof shall not exceed 50 % LEL (2)	MBR-10-IND-014
Facility	Facility – Wide emissions include potential emissions from existing petroleum storage tanks, Marine	VOC Individual HAP (1)	\leq 96.0 tons per month \leq 197.0 tons per 12-month rolling period \leq 4.5 tons per month \leq 9.0 tons per 12-month rolling period	310 CMR 7.02 310 CMR 7.24
- Wide	loading, and fugitive emissions that are not the focus of this Approval	Combined HAPs ⁽¹⁾	\leq 12.0 tons per month \leq 24.0 tons per 12-month rolling period	310 CIVIR 7.24

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Table 2 Notes:

- (1) Individual HAP and combined HAPs emissions determined utilizing the emission factors and calculation procedures submitted as part of Special Terms and Conditions, Section 4.i) of Approval MBR-10-IND-014, issued on February 13, 2013.
- (2) Lower explosive limit (LEL) measured in accordance with EPA Method 21, as identified in 40 CFR Part 60, Appendix A, or another method approved by MassDEP.

Table 2 Key:

EU# = Emission Unit Number

Gasoline = Organic material having a vapor pressure of 1.5 pounds per square inch absolute or greater except that ethanol, which has a vapor pressure of less than 1.5 pounds per square inch absolute, shall be included

VOC = Volatile Organic Compounds

HAP = Hazardous Air Pollutant

 $H_2O = Water Column$

mg = milligrams

- = negative

 \leq = less than or equal to

B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

	Table 3
EU#	Monitoring and Testing Requirements
EU#	1. Monitor the volume of gasoline loaded into each tank truck in gallons utilizing volumetric flow meters. 2. Monitor the pressure in the vapor recovery line connected to each tank truck utilizing continuous pressure monitoring systems such that compliance with a target vacuum negative pressure of 3 inches (or other value as approved by MassDEP) water column, instantaneous and 15-minute rolling average (or other value as approved by MassDEP), is maintained during loading of the tank truck. Electronic interlocks for each of the loading bays, and visible and audible alarms in the Facility's control room, shall be installed and operated to prevent loading of the tank truck if the vapor recovery hose is not connected properly or whenever the VANPT's required tank truck vacuum pressure as specified in Table 2 is not maintained, or if a vacuum of less than 0.5 inches of H ₂ O for 60 seconds is detected. Monitor pressures at each loading bay for a minimum of ninety five (95) percent of the actual loading operating time per calendar quarter. 3. Monitor the VOC outlet emissions (in percent VOC or parts per million (ppm) measured as propane) from the VRU stack continuously utilizing continuous emissions monitoring systems (CEMS). Electronic interlocks, and visible and audible alarms in the yard and the Facility's control room, shall be installed and operated to prevent the loading of any tank truck whenever the required VRU hourly
	outlet VOC emission limit as specified in Table 2 is not maintained. Monitor VOC outlet emissions from the VRU stack for a minimum of ninety five (95) percent of the VRU operating time per calendar quarter.
	4. Monitor the VRU operating time electronically.
	5. Calculate emissions of individual HAP and combined HAPs for each month. Calculate emissions of VOC, individual HAP, and combined HAPs for each 12-month rolling period.

	Table 3		
EU#	Monitoring and Testing Requirements		
P0.1	6. Conduct an emissions compliance test at representative conditions within ninety (90) days after commencement of operation of the VRU upgrade. Thereafter, the Permittee shall conduct compliance tests when required by MassDEP. All compliance testing or other testing related to MassDEP approval and establishment of emission limits or terms contained in a Final Approval shall be conducted in accordance with 310 CMR 7.13.		
P2-1	7. Operate and maintain the loading rack and its associated equipment including the VRU's ACBAS, VANPT, and CEMS in accordance with the manufacturers' recommendations and Standard Operating and Maintenance Procedures (SOMP). The VOC outlet CEMS shall comply with the applicable procedures for CEMS as stated in 40 CFR 60, Appendices B and F, or other procedures as approved by MassDEP.		
R4-17, R4-20, S4- 32, S4-34, S4-39	 MassDEP. On a monthly basis, perform a visual inspection of the floating roof through roof hatches and manways in the fixed roof. To the extent possible, the visual inspection shall include, but not be limited to: Sunken roof, collapsed or unsealed roof legs; Liquid accumulated on top of floating roof; Covers, lids, seals, or vacuum breakers not closed; Holes, tears, or other openings through the rim seal; Visible gaps between the seal and the tank shell; Gaps or other observable problems with deck fitting covers, gaskets, or equipment, such as guidepole wipers, sleeves, floats or flexible enclosures, if so equipped; Inspect the periphery of the tank shell, piping, pumps, and other components that contain organic product associated with the tank for possible leaks. Semi-annually, in addition to the monthly requirements above, measure the organic vapor concentration in the vapor space above the floating roof in terms of the lower explosive limit (LEL) in order to demonstrate compliance with the requirements in Table 2 above. Monitor the average monthly storage temperature, the true vapor pressure, monthly throughput and type of organic material stored. Monitor and calculate emissions of individual VOC, HAP and combined HAPs for each month. Calculate emissions of VOC, individual HAP, and combined HAPs for each 12-month rolling period. 		
Facility – Wide	12. Calculate emissions of VOC, individual HAP and combined HAPs for each month and each 12-month rolling period.		

	Table 4
EU#	Record Keeping Requirements
	1. Record the volume of gasoline loaded into tank trucks in gallons per day and gallons per 12-month rolling period.
P2-1	2. Install and operate a data acquisition and handling system (DAHS) to record the instantaneous and 15-minute rolling average (or other value as approved by MassDEP) pressures, in inches of H ₂ O as well as instances where the interlock system prevented loading due to vapor hose connectivity problems at each loading bay during loading of each tank truck. These records shall be maintained on a computer in the Facility's control room or other readily accessible location.
	3. Install and operate a DAHS to record one-hour average VRU outlet VOC emissions (in percent VOC or ppm measured as propane). These records of VOC emissions shall be maintained on a computer in the Facility's control room or other readily accessible location.

	Table 4
EU#	Record Keeping Requirements
	4. Record, per calendar quarter: a) VRU operating time; b) data capture percentages for the continuous pressure monitoring systems and outlet VOC CEMS; and, c) time periods of noncompliance with the tank truck vacuum pressure and the VRU outlet VOC concentration limits as contained in Table 2, including reason for noncompliance, corrective action taken, and action being taken to prevent reoccurrence in the future. 5. Record emissions of individual HAP and combined HAPs in tons per month. Record emissions of
P2-1	VOC, individual HAP, and combined HAPs in tons per 12-month rolling period. Said records shall be maintained in a record keeping log or equivalent. 6. Maintain records of all malfunctions of emissions control and monitoring equipment including, at minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective actions taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the equipment was returned to compliance.
	7. Maintain records of emissions compliance test results or other test results related to MassDEP approval and establishment of emission limits or terms contained in a Final Approval and any reports containing said test results. (See Special Terms and Conditions, Item 1 of this Plan Approval).
	8. Maintain on-site and accessible at or near the subject equipment, at all times, a copy of this Approval letter and the SOMP for the subject equipment.
	9. Maintain records of all maintenance performed, including description and date/time work was completed, on the loading rack and its associated equipment including the VRU's ACBAS, VANPT, CEMS, and DAHS.
R4-17, R4-20, S4- 32, S4-34, S4-39	10. Maintain and keep onsite for a minimum of five years a record of the average monthly storage temperature, the true vapor pressure, monthly throughput, type of organic material stored, monthly and twelve month rolling VOC and individual HAP and combined HAPs emissions, the results of any inspections or tests conducted, modifications or repairs done, and any reports or notifications submitted to MassDEP or EPA in accordance with applicable Regulations or requirements.
Facility - Wide	11. Record emissions of individual HAP and combined HAPs in tons per month and tons per 12-month rolling period. Said records shall be maintained in a record keeping log or equivalent.
	 12. Maintain records for the preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12. 13. Maintain all records or reports required by this Approval on-site for five (5) years and make said records or reports available to MassDEP personnel upon request.

	Table 5
EU#	Reporting Requirements
	1. Report deviations from the requirements of this Approval in accordance with the Facility's Operating Permit and 310 CMR 7.00: Appendix C.
P2-1	2. Submit for any required emissions compliance testing or other testing related to MassDEP approval and establishment of emission limits or terms contained in a Final Approval: a) a written test protocol, for review and MassDEP approval, at least thirty (30) days prior to the anticipated date of testing, and b) include in the test protocol, at minimum, a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the testing, and c) submit a test results report, for review and MassDEP approval, within sixty (60) days after completion of the testing. 3. Should the SOMP provided in the Application need revision, submit an updated SOMP to MassDEP no later than sixty (60) days after MassDEP's approval of the emissions compliance test results report. Thereafter, submit updated versions of the SOMP no later than thirty (30) days prior to occurrence of a significant change. The updated SOMP shall supersede prior versions of the SOMP.

	Table 5
EU#	Reporting Requirements
Hacility - Wide	4. Accurately report to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form.

4. SPECIAL TERMS AND CONDITIONS

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

	Table 6
EU#	Special Terms and Conditions
P2-1	1. The Permittee shall review all available data and propose for incorporation in the Final Approval a <i>CEMS Correlation Factor</i> to limit the VOC concentration (in percent VOC or ppm measured as propane, one-hour average) at the VRU exhaust stack based upon collection of sufficient VOC concentration data (in percent VOC or ppm measured as propane, one-hour average) by the CEM at the VRU outlet, compliance testing results, or any other testing as approved by MassDEP. The term may be an emission limit, algorithm that correlates VRU outlet VOC concentration to VRU inlet VOC concentration, or other provision that ensures continuous compliance with the VOC emission limit/standard of 2 milligrams per liter of gasoline loaded over a one-hour period. 2. The Permittee shall maintain an adequate supply of spare parts on-site for all air pollution control-related equipment and to maintain the on-line availability and data capture requirements for the continuous pressure and VOC emission monitoring systems serving the VRU and VANPT. 3. Tank trucks loading in Bays 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 shall only be loaded from the bottom (bottom loading). The Permittee shall insure that tank trucks previously containing gasoline and returning to the Facility to load distillate fuel products (switch loading) shall only do so in bays with VANPT. There shall be no loading of gasoline or switch loading in Bays 12, 13, 14, 15, 16 and 17 which shall be designated for loading of tank trucks from the top (top loading) only.

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	Table 6
EU#	Special Terms and Conditions
R4-17, R4-20, S4-	4. Tank Cleaning – The Permittee shall utilize an air pollution control device(s) having an overall
32, S4-34, S4-39	minimum control efficiency of 98 percent by weight to control the VOC and HAPs vapor emissions
	from storage tank degassing activities associated with tank degassing, cleaning and sludge removal,
	including vacuum truck emissions, down to 5,000 parts per million (ppm). In conducting any such
	degassing activities, the Permittee shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except for the limited time necessary to connect or disconnect degassing
	equipment or to conduct tank contents or emissions sampling or to facilitate removal of gasoline vapor
	from the tank to the control device. Notwithstanding the terms of this Paragraph, the Permittee shall not
	be precluded from introducing liquids to or removing liquids from the tank. The Permittee shall notify
	MassDEP by electronic mail, as soon as practicable, but no later than one (1) business day prior to any
	such gasoline storage tank degassing activity. The Permittee shall subsequently submit a written report
	to MassDEP summarizing the degassing activity, including quantification or estimation of VOC and
	HAPs emissions, the reason for the degassing activity, the air pollution control device used, as well as
	its overall VOC and HAPs control efficiency, and the name of any contractor used to control said
	emissions, within fifteen (15) days of the conclusion of the degassing activity. To quantify or estimate
	the VOC and HAPs emissions, the Permittee shall use the American Petroleum Institute calculation
	techniques contained in "Evaporative Loss from the Cleaning of Storage Tanks", Technical Report
	2568, dated November 2007, or other calculation techniques agreed to in writing by MassDEP and the Permittee. If the Permittee determines that there is an imminent risk of explosion if the tank is not
	immediately degassed, the Permittee shall not be required to provide the advance notice or use the air
	pollution control device described in this Paragraph. However, after the imminent risk of explosion has
	been alleviated, any further degassing activity shall comply with this Paragraph. Further, in such a
	situation, notice of the degassing activity and a written explanation of the imminent risk of explosion
	that occurred, its cause(s), the need for immediate degassing, the steps taken to minimize VOC and
	HAPs emissions, and a quantification of the resulting VOC and HAPs emissions, shall be provided to
	MassDEP as soon as practicable, but no later than two (2) business days after the imminent risk of
	explosion has been alleviated.
	5. Seasonal Fuel Switching/Tank Landings - During seasonal fuel switching or any other roof landing
	event that does not trigger the requirements of Special Terms and Conditions, Item 4 above, where such
	seasonal fuel switching or other roof landing event would cause the potential emission of VOC and/or
	HAPs from the storage tank exceeding one (1) ton, as calculated using the emission estimation procedures found in Section 7.1 - Organic Liquid Storage Tanks of EPA's most recently published
	compilation of air pollutant emission factors (AP-42), or other calculation techniques agreed to in
	writing by MassDEP and the Permittee, the Permittee shall utilize an air pollution control device(s)
	having an overall minimum control efficiency of 98 percent by weight to control the VOC and HAPs
	vapor emissions from the storage tank. In conducting any such seasonal switching or roof landing
	event, the Permittee shall not open the interior vapor space of a tank to the atmosphere through a hatch
	or manway, except for the limited time necessary to connect or disconnect degassing equipment or to
	conduct tank contents or emissions sampling or to facilitate vapor removal from the tank.
	6. The requirements in Special Terms and Conditions, Item 4 and Item 5 above shall be superseded by
	the requirements of Regulation 310 CMR 7.24, if/when it is revised.

	Table 6
EU#	Special Terms and Conditions
Facility - Wide	7. Vapor and Liquid Leak Detection – The Permittee shall initiate repair of any liquid or vapor leak, regardless of the method of detection, as soon as practicable, but no later than one (1) day after the leak is detected. The Permittee shall complete repair of the leak or replacement of the leaking component as soon as practicable within five (5) days of detection of the leak, unless MassDEP has agreed to an extension of the five (5) day repair time period. Detection of liquid or vapors leaking from a gasoline tank truck shall result in terminating active loading and notifying the truck driver of the observed leak. The leaking truck shall be prevented from loading at the Facility until such time as the tank truck has been repaired and re-certified as meeting the annual leak certification criteria under 310 CMR 7.24. In addition, within one (1) business day of identifying a leaking tank truck, the Permittee shall provide written notification to MassDEP, by electronic mail, of the leaking tank truck. Said notification shall include the tank identification number, the owner or operator of the tank truck, and the nature of the leak. 8. The Permittee shall be exempt from the Best Available Retrofit Technology (BART) requirements as a result of the facility wide VOC emission limits specified in Table 2 that cap those emissions below
	250 tons per year.

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as "shanty caps" and "egg beaters."
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground, feet	Stack Exit Size, inches	Maximum Exhaust Gas Exit Velocity, feet per second	Outside Stack Shell Material
P2-1	27	10	27	Carbon Steel

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

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- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and/or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

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7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Approval, please contact Cosmo Buttaro by telephone at (978) 694-3281, or in writing at the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Cosmo Buttaro Environmental Engineer This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Edward J. Braczyk Acting Permit Chief Bureau of Air and Waste

cc: Board of Health, 249R Broadway, Revere, MA 02151

Fire Headquarters, 400 Broadway, Revere, MA 02151

MassDEP/Boston: Yi. Tian

MassDEP/NERO: Martha Bolis, Mary Persky, Ed Braczyk, Joe Su, Tom Hannah

Susan Ruch, Deputy Regional Director, MassDEP NERO/BAW

Email: susan.ruch@state.ma.us